

## WHAT IS CLAIMED IS:

1. An image sensing apparatus comprising:

an image sensing element that outputs a charge  
signal in accordance with a light amount of an object  
5 image formed on a light-receiving surface;

a light-shielding unit that shields said image  
sensing element from incident light;

a plurality of compensation units that compensate  
a loss in exposure amount for said image sensing  
10 element caused by operation of said light-shielding  
unit;

a setting unit for setting at least one of an  
image sensing mode and an image sensing condition; and

a compensation control unit that controls a  
15 compensation amount for each compensation unit in  
accordance with the at least one of the image sensing  
mode and the image sensing condition that is set by  
said setting unit.

2. The apparatus according to claim 1, wherein said  
20 plurality of compensation units include at least an  
image sensing element control unit that controls a  
charge accumulation time in said image sensing element  
and a gain control unit that controls a gain of the  
charge signal.

25 3. The apparatus according to claim 2, wherein if  
the at least one of the image sensing mode and the  
image sensing condition that is set by said setting

unit is set to preferentially control the charge accumulation time, said compensation control unit preferentially controls said gain control unit.

4. The apparatus according to claim 2, wherein if  
5 the at least one of the image sensing mode and the image sensing condition that is set by said setting unit is not set to preferentially control the charge accumulation time, said compensation control unit preferentially controls said image sensing element  
10 control unit.

5. The apparatus according to claim 2, wherein if the image sensing condition set by said setting unit is set to control the charge accumulation time to become equal to or shorter than a predetermined time, said  
15 compensation control unit preferentially controls said gain control unit.

6. The apparatus according to claim 2, wherein if the image sensing condition set by said setting unit is set to control the charge accumulation time to become  
20 longer than a predetermined time, said compensation control unit preferentially controls said image sensing element control unit.

7. The apparatus according to claim 1, wherein said light-shielding unit shields light at least for a  
25 period during which said image sensing element outputs the charge signal.

8. The apparatus according to claim 1, wherein said

compensation control unit gives a priority order to each of said plurality of compensation units in accordance with the at least one of the image sensing mode and the image sensing condition that is set by  
5 said setting unit, and controls the compensation amount for each compensation unit in accordance with the priority order.

9. A method of controlling an image sensing apparatus comprising an image sensing element that  
10 outputs a charge signal in accordance with a light amount of an object image formed on a light-receiving surface, a light-shielding unit that shields the image sensing element from incident light, a plurality of compensation units that compensate a loss in exposure  
15 amount for the image sensing element caused by operation of the light-shielding unit, and a setting unit for setting at least one of an image sensing mode and an image sensing condition, wherein

a compensation amount for each compensation unit  
20 is controlled in accordance with the at least one of the image sensing mode and the image sensing condition that is set by the setting unit.

10. A method of controlling an image sensing apparatus comprising an image sensing element that  
25 outputs a charge signal in accordance with a light amount of an object image formed on a light-receiving surface, a light-shielding unit that shields the image

sensing element from incident light, a plurality of compensation units that compensate a loss in exposure amount for the image sensing element caused by operation of the light-shielding unit, and a setting unit for setting at least one of an image sensing mode and an image sensing condition, wherein

a priority order is given to each of the plurality of compensation units in accordance with the at least one of the image sensing mode and the image sensing condition that is set by the setting unit, and the compensation amount for each compensation unit is controlled in accordance with the priority order.

11. A storage medium, readable by an information processing apparatus, storing a program including program codes capable of realizing the control method according to claim 9, the program being executable by the information processing apparatus.

12. A storage medium, readable by an information processing apparatus, storing a program including program codes capable of realizing the control method according to claim 10, the program being executable by the information processing apparatus.